Changes in Beliefs about Language Learning and Teaching by Foreign Language Teachers in an Applied Linguistics Course

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Abstract

This article presents the results of a study on the language learning and teaching beliefs of graduate students enrolled in an applied linguistics course in a language teaching program. Ten participants completed a questionnaire at the start of the course and another at the end; their responses were analyzed both quantitatively and qualitatively. Following the course, changes were identified in the participants' beliefs about the difficulty of learning a second language and their goals for their future students.

Background

Classes in linguistics, such as applied linguistics, sociolinguistics, and second language acquisition (SLA), regularly form part of language teacher education programs, even though the relationship between theory and practice and the role of linguistics in second/foreign language¹ (FL) teaching have not always been clear in recent years. From these classes in linguistics, it is expected that students will gain advanced knowledge of their subject matter that will allow them to make principled decisions in the classroom and evaluate teaching materials (e.g., Bardovi-Harlig, 1997). However, when student expectations for these classes do not match those of instructors, students may not be open to learning about linguistics and may even reject what is presented to them in class (e.g., Lo, 2005; Siebert, 2003). Language teachers are often encouraged to undertake research and examine their own practice, commonly through action research projects, yet teacher educators of linguistics courses have been slow to adopt this practice themselves (Bartels, 2002). Therefore, it is important to research how these courses are implemented and to analyze student outcomes in order to ensure that course material adequately addresses students' needs and is relevant to teachers' current and future practice (e.g., Ellis, 2010; Morrison, 1979; Thornbury, 1997).

In recent years, researchers have responded to Bartels's (2002) call to analyze both quantitatively and qualitatively the gains that are made in linguistics classes for teachers (see in particular Bartels, 2005a). The present study seeks to add to that body of work; it is believed to be the first to explore the beliefs of FL teachers with different first languages (L1s) before and after a graduate course in applied linguistics.

Review of the Literature

Theory and Practice in Language Teacher Education

The relationship between theory and practice in language teacher education, as well as the role of the study of linguistics for language teachers, has been debated for decades. Several proposals will be reviewed here, followed by an exploration of the constructs of teacher beliefs, knowledge about language, and language awareness. However, the bulk of this review focuses on studies of outcomes of courses in linguistics for FL teachers, due to their similarities to the present study.

In order to know what teachers should learn about language in their preparation, it is useful to review the history of applied linguistics and language teaching. Language teacher education programs are usually located in one of the following departments: education, languages and literature, or applied linguistics (Crandall, 2000). The study of linguistics is mandated by the American Council on the Teaching of Foreign Languages (ACTFL) Program Standards for the Preparation of Foreign Language Teachers (2013) as part of Standard 3. Yet, diverging views on the relationship between linguistics and language teaching are readily apparent in the literature, particularly in that of the 1970s through the 1990s. Some cautioned against a direct relationship between the two fields (Morrison, 1979; Thornbury, 1997; Wilkins, 1972); it was felt that the teacher's own insight could be more valuable than knowledge of linguistics for some components of FL teaching (Ogasawara, 1983). However, Bardovi-Harlig (1997) outlined several practical uses for SLA for teachers as a justification for its inclusion as a course in language teacher education programs, including evaluating methods and materials, dispelling myths, suggesting areas for teaching, showing what language acquisition actually looks like, characterizing processes and factors involved in SLA, outlining the roles of the teacher and the learner, and permitting greater access to professional literature. In more recent years, the centrality of applied linguistics in language teacher education has been affirmed (e.g., Crandall, 2000; Ellis, 2010). Ellis (2010) asserted that a "close connection between theory and research in SLA and language pedagogy was established from the start" (p. 183).

Knowledge of linguistics has been deemed advantageous for language teachers in that it increases their familiarity with second language acquisition and helps with decision-making in the classroom. Familiarity with the linguistic development of language learners can aid teachers in holding realistic expectations for students (Rogers, 1988), and most language teaching decisions can be better made when one understands language deeply (Wilkins, 1972). Though many have agreed that knowledge of linguistics is useful, teachers have not always been able to access this knowledge, because of the academic discourse used in reporting it. Ellis (2010) advocated for the writing of research summaries that would be more useful for teachers; according to Ellis, these summaries should emphasize pedagogical concepts over theoretical constructs and a narrative discourse style over an expository style.

Although knowing about language and language learning is crucial, Bartels (2005b) pointed out that what teachers do in practice goes beyond simply using this knowledge. As noted by Freeman and Johnson (1998), "teacher educators have come to recognize that teachers are not empty vessels waiting to be filled with theoretical and pedagogical skills; they are individuals who enter teacher education programs with prior experiences, personal values, and beliefs that inform their knowledge about teaching and shape what they do in their classrooms" (p. 401). In the 1990s, Woods (1996) highlighted that, in general, most research had tended to focus on the learner or the process of second language learning, rather than what the teacher brings to that process. This has changed in the intervening years; therefore, the next section reviews the concepts of beliefs and knowledge as they relate to teacher education and practice that have been investigated since that time. It is important to note that the beliefs described here relate to teachers' educational beliefs, which are only one part of teachers' entire belief systems (Pajares, 1992). Nonetheless, as Pajares notes, these particular beliefs are not detached from the wider belief system of the individual.

Teacher Beliefs, Knowledge, and Attitudes

The literature reveals many different definitions of terms that represent teacher cognition, such as belief, knowledge, attitude, and awareness; this abundance of labels can make comparisons across studies difficult, yet provides for nuances in describing teacher cognition. Arnett and Turnbull (2007) provided an enlightening discussion of studies in second language (L2) teaching between 1990 and 2005 that examined beliefs, finding three trends: explicit discussion of the construct of teacher beliefs, implicit discussion of the construct, and no discussion of the construct. Richardson (1996), not included in that review, gave the following definition in her discussion of the terms in use in the literature: "Attitudes and beliefs are a subset of a group of constructs that name, define, and describe the structure and content of mental states that are thought to drive a person's actions" (p. 102). However, Attardo and Brown (2005) noted the confusion in the literature over the two terms and opted to use them interchangeably, since "in practice, the distinction is very seldom clear" (p. 102). Busch (2010) also avoided making any distinction among the many terms used in previous related studies, labeling any views on second language teaching or learning in her study "belief" (p. 320).

The relationship between belief and knowledge has been studied a great deal, with some researchers proposing that they are different but related, while others take them to be synonymous (Pajares, 1992). Furthermore, there is debate over the types of knowledge that teachers possess and use in their practice. Woods (1996) posited that teachers' knowledge can be described as both declarative and procedural; he also mentioned other types of knowledge involved, among them, content knowledge (of the subject matter) and instructional knowledge (knowledge of how to teach). In Woods' comprehensive study of eight ESL teachers' planning for the classroom and their interpretations of classroom events, he encountered difficulty in ascertaining whether the participants' decisions were related to their knowledge, their beliefs, or what they believed they knew. He speculated that knowledge, assumption, and belief are points located on a continuum that may overlap; he therefore proposed a hypothetical construct of belief, assumptions, and knowledge (BAK). BAK can change over time and was found to be in use at each stage of lesson planning and delivery. MacDonald, Badger, and White (2001) agreed that BAK is intimately related to classroom practice; therefore, changes in beliefs can lead to perceptual changes and changes in routines.

Though, as noted above, the term belief and other related concepts have been defined in various ways over the years, Pajares (1992) indicated in his seminal review on the topic that the construct of teacher beliefs is "less messy, far cleaner, and conceptually clearer than it may appear," calling it potentially "the single most important construct in educational research" (p. 329). The widely cited apprenticeship of observation (Lortie, 1975) refers to the fact that teacher candidates have already witnessed thousands of hours of teaching in their own education and formed their beliefs of how teaching should be. The importance of these beliefs lies in their potential to affect or filter the knowledge that teacher candidates take in while enrolled in education programs (Horwitz, 1985; Johnson, 1994; Pajares, 1992; Richardson, 1996). These beliefs may not be at the level of conscious awareness, and if they are not dealt with in the teacher education program, teachers may continue to teach as they were taught (Bailey et al., 1996; Johnson, 1994).

By the time a student reaches college, his or her beliefs about teaching are set (Pajares, 1992); among pre-service teachers, attitudes have been found to vary by gender (Siebert, 2003), planned level of teaching, and age (Richardson, 1996). Furthermore, language teachers have been exposed all their lives both to folk conceptions of language and theoretical claims about language learning (Siebert, 2003; Woods, 1996). The resistance of teachers' beliefs to change has been duly noted. Along with raising teacher candidates' awareness of their own beliefs, practical experiences and opportunities for reflection should be provided throughout the teacher education program, in order to address the role that prior beliefs may play in the formation of teachers' views of effective practices (Crandall, 2000; Johnson, 1994). In order to change, an individual must not only have an awareness of the potential for change but also be dissatisfied with current beliefs and able to accept and understand a new belief (Pajares, 1992). Furthermore, one belief cannot be changed by itself, as beliefs are part of a network with interwoven elements (Woods, 1996). For these reasons, a top-down approach to changing beliefs, such as one that might be taken by a teacher education program in response to research findings on beliefs, may not be successful; belief change comes about through interaction and the experience of putting knowledge into practice (Woods, 1996).

Applied Linguistics in Teacher Education

Throughout the years, authors have proposed changes to the traditional components of the language teacher education curriculum, which usually includes courses in linguistics, methodology, and some sort of practical experience. Morrison (1979) urged teacher educators to consider relevance as the key factor in designing course content in linguistics; Bartels (2005c) echoed this concern in advising that language teacher education begin from a point of taking into account teachers' current knowledge and what they need, rather than from the point of what programs can offer them in the way of applied linguistics. Ellis (2010) proposed 11 principles for designing an SLA course for a TESOL/FL teaching program, among them the ideas that the teacher educator is to serve as mediator, and that the teachers or teacher candidates themselves ultimately should determine the relevance of the course material. Popko (2005) went beyond making recommendations for individual courses to consider the articulation between courses in a program, maintaining that "a more deliberate articulation of

methodology and linguistics within MA-TESL programs might provide teachers with a more disciplined approach to utilizing their KAL [knowledge about language] in ESL classrooms" (p. 402). For instance, he noted that the methodology course could address the connections between diagramming sentences and explaining grammar, and phonology could be followed up with information on how to teach pronunciation.

The recommendations described above, along with others, have come as much from authors' perspectives on the relationships between theory and practice as from empirical research. However, the early 2000s saw an increase in research on outcomes in language teacher education programs and courses; much of the research on courses in linguistics is contained in the series of chapters in Bartels (2005a). Bartels noted that it is "not enough to simply provide a short apprenticeship in applied linguistics and hope for the best because the knowledge that teachers use in their practice is more complicated that [sic] just knowing facts and general conceptions of language and language learning" (2005c, p. 419). He called for research into how language education programs and courses affect teachers' knowledge. These and other similar studies will be reviewed in detail below.

Research on outcomes related to training in linguistics has been conducted with students in courses such as introduction to linguistics, sociolinguistics, and SLA; these outcomes are encouraging about the nature of belief change. For instance, a survey of pre-service teachers of L1 English before and after a third year, undergraduate introductory linguistics course found that simply being exposed to facts about language produced greater acceptance of features of African American Vernacular English (AAVE) among 25% of the participants (Attardo & Brown, 2005). Another 2005 study focused on attitudes towards a variety of languages (Riegelhaupt & Carrasco, 2005). Elementary, middle, and high school teachers, administrators, and counselors in Whiteriver, Arizona, took part in a course provided by the researchers that focused on specific linguistic phenomena, such as past-tense formation, as manifested in Apache English. By the end of the study, the teachers' journal entries showed more openness towards Apache English and an understanding that their students were not deficient—they merely needed assistance to be able to manage another variety of English. These studies seem to suggest that, contrary to what can be found in the literature on teacher beliefs, exposure to information on varieties of language may be sufficient for teachers to reevaluate their attitudes towards them.

Four recent studies have examined the effects of an SLA class for teachers, and what appears to be consistent across the studies is students' perception of SLA theory. In Angelova (2005), it was observed that the students in an MA-TESOL program had difficulty relating to theory in an SLA class. Angelova, also the instructor of the course, changed the course content to include mini-lessons in Bulgarian (her L1) that incorporated aspects of theory about which the students were learning, such as transfer, error correction, and inductive and deductive reasoning. Not all of the students experienced the lessons positively—they were anxiety-inducing for some—but on the whole, the study concluded that students had internalized some SLA concepts through their experiences as L2 students of Bulgarian.

What seems to have been a less contextualized SLA course served as the backdrop for an in-depth case study carried out by Lo (2005) that included interviews with the instructor in an MA-TESOL program, interviews with one teacher-learner,

and the analysis of assignments and textbooks. The instructor and the teacher-learner, Peiling, were found to have a complete mismatch of goals and understandings of the course objectives. Peiling felt that the course was too theoretical, the readings did not help her know what to do in the classroom, and the instructor did not answer students' questions, nor ask them what the research meant to them. It was her teaching context that played the most important role in her determination of what was useful to her. However, her own beliefs also played a role in limiting her intake of the SLA course material; for example, she was unconvinced by the morpheme order studies presented by the instructor, because she did not think she herself had gone through those stages. A key implication of this study is that instructors of SLA courses must avoid mismatches like the one described here, or it will not matter what is taught or how it is packaged—students will not be convinced.

Another study that examined the possible effects of an SLA course, with a particular focus on theory, is one by MacDonald, Badger, and White (2001). Using L2 statements adapted from Lightbown and Spada (1995), the researchers designed a questionnaire that was given to both graduate and undergraduate students in SLA courses at the same institution, at the start and end of the semester, along with a control group—a significant advantage of the study as compared to others. At the end of the course, results indicated all students had moved away from a behaviorist view of language learning. Students also expressed less agreement at the end of the semester with the idea that language learning must begin early in school. Therefore, the SLA course seems to have been helpful in changing even long-held beliefs about language learning.

A study by Busch (2010) differs from the other studies of SLA courses described here in the instrument used and the large number of participants. She employed the widely used Beliefs about Language Learning Inventory (BALLI) (Horwitz, 1988) before and after the same SLA course taught over three years, with a total of 381 pre-service teachers. The inventory contained 23 statements with which participants expressed the level of their agreement. In addition, participants were instructed to compare their pre- and post-course survey answers at the end of the course and to write about the four beliefs that had changed the most, which provided insight into the course and the process of change. One of the most salient results of the study was the dramatic change in belief regarding the number of years the participants thought it would take a person to learn a second language in just one hour a day, from a precourse mean of 3-5 years to the post-course mean of 5-10 years. This finding seems to correspond to Siebert's (2003) study of ESL student and teacher beliefs in intensive ESL programs, in which the majority of the students chose 3-5 years for the same item on the BALLI (although males tended to select less time, and females tended to select more time), while the selection of half of the teachers was 5-10 years. Therefore, increased KAL (in the form of the expertise represented by teachers' training) may lead to increased expectations of difficulty of language learning.

Bartels (2005b), as mentioned above, called for research into the effects of knowledge about applied linguistics for teachers, affirming the following:

Not only might the relationship between applied linguistics knowledge and language teaching be more complex than theorized, it is also possible that we are, unwittingly and with the best of intentions, imposing practices of the applied linguistics discourse community on language teachers during teacher education which are not helpful for the practice or language teaching. . . something I refer to as 'linguistics imperialism.' (p. ix)

However, Bartels noted in reviewing the chapters from his (2005a) edited volume that it is clear that teachers find applied linguistics courses relevant to their professional development and to their practice, and that "applied linguistics can also change teachers' intentions of how they will teach" (Bartels, 2005c, p. 406). The importance, then, of investigating teachers' beliefs cannot be overstated. Furthermore, in the studies reviewed above, beliefs about language learning among FL teachers are underrepresented, owing to the predominance of studies on ESL programs and ESL teaching. It is not clear whether differences may be found in a different population, and Busch (2010) noted the need for further research to add to the body of literature on language teacher beliefs.

In an attempt to answer these calls for research, the present study examined beliefs about language teaching and learning among pre-service and in-service teachers of world languages and ESL teachers who were enrolled in an applied linguistics course. The study contributes knowledge of the ways in which these participants' beliefs changed following their participation in the class.

Methods

The study described in the following sections investigated beliefs about language, language learning, and language teaching among 10 graduate students in a language teaching program, each with different background characteristics and teaching experience. Specifically, the questions that guided this research study are as follows:

- 1. What changes can be observed in practicing and pre-service teachers' stated beliefs about the topics below, following a graduate course in applied linguistics?
 - prescriptivist views of language
 - difficulties in FL learning
 - similarities between first and second language acquisition
 - the utility of linguistics for the FL teacher
 - · their personal goals for their students
- 2. What do participants feel they gain from the applied linguistics course?

The following sections describe the participants in the study, the procedures, and the methods of analysis.

The Course

Applied Linguistics in Second/Foreign Languages is one of the required core courses in the Master of Arts in the Teaching of Languages (MATL) program at the University of Southern Mississippi, and it is regularly offered both online and on campus. The course topics comprise the main subfields of linguistics, including phonetics and phonology, morphology, syntax, semantics, pragmatics, language variation in space and time, and first and second language acquisition. The course

textbook is Fromkin, Rodman, and Hyams's (2013) An Introduction to Language; in addition, students read Pinker's (2007) The Language Instinct on their own and write a reaction paper. Course assignments require students to make connections between what they learn about linguistics and their current or future practice in the classroom; such assignments include reflection papers and instructional activities that are based on textbook chapters. The researcher was also the instructor of the course. The study was conducted in accordance with the policies of the Institutional Review Board at the university.

Participants

Eleven graduate students in the MATL program were enrolled in an on-campus section of the course described above in the fall of 2013; ten completed both the pre-questionnaire and the post-questionnaire. Their characteristics are summarized in Table 1.

Table 1 Participant Characteristics.

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#	Gender	L1	Fluent In	Studied Formally	Teaching
1	M	English	English, Spanish	Spanish, Greek, Latin	TA - Spanish
2	F	English	English	Spanish	TA - Spanish
3	M	Chinese	Chinese, English	English, Japanese	None
4	F	English	English	Spanish, Korean, Mandarin Chinese	None
5	M	French	French, English, Spanish	English, Spanish, Italian, Russian, Arabic, Ancient Greek	Teaching French
6	F	English	English, Spanish	Spanish	TA - Spanish
7	F	Spanish	Italian	English, Italian, French	TA - Spanish
8	F	Spanish	English, French	English, French, Italian	Teaching Spanish
9	M	English	English, Spanish, Portuguese	Spanish, Portuguese, Mandarin, Greek, Catalan, Nahuatl, Yucatec, Ch'ol	TA - Spanish
10	F	English	English	Spanish, Italian	None

There were six females and four males, ranging in age from 22-28, with a mean age of 24. Two of the participants were teaching their own lower-level FL courses at the university, while five were teaching assistants, working with instructors in 100-level FL courses. The other three participants were not teaching or assisting at the time of the study, but planned to teach in the future. There was diversity among the group in terms of language background: six of the participants were native speakers (NSs) of English, two were NSs of Spanish, one was a NS of French, and one was a NS of Mandarin Chinese. It should be noted that the fluency referenced in the fourth column of Table 1 is according to the participants' own perceptions; also, the questionnaire did not request specifics such as length of study or level of proficiency in the languages participants had studied formally. The teaching situation in the final column refers to the participants' situation during the semester of the applied linguistics course. There are three language emphases offered in this master's program: ESL, French, and Spanish.

Participants 3, 4, and 10, all in the ESL emphasis, were not teaching at the time of the study, as Table 1 indicates, but Participant 3 did provide tutoring in Mandarin in the language laboratory to undergraduate students. Each of the three planned to teach ESL following the program, with Participants 3 and 4 planning to teach high school, and Participant 10, from elementary school to college. Participants 1, 2, 6, 7, and 9 were teaching assistants in 100-level Spanish classes, which involved assisting instructors with grading, exam creation, and activity preparation; participating in classroom management; and teaching two lessons independently. Participant 8 was teaching Spanish 201 and 202 on her own. Of the students in the Spanish emphasis, Participant 2 planned to teach high school Spanish, and Participant 8 wrote on the post-questionnaire that she wanted to teach at the university level, but the rest did not specify a level. Participant 1 planned to teach both Spanish and ESL and wrote on the post-questionnaire that he was considering opening a language school. Participant 5 was teaching French 101 and planned to pursue a doctorate degree in linguistics.

It is worth noting the participants' previous experience with linguistics; Participants 3, 5, 7, and 8 had already taken two or more courses in linguistics, prior to the applied linguistics course. Participants 5 and 8, as observable in their status as teaching their own classes, were in their second year of the program and had taken two other core courses: teaching methods and sociolinguistics. Participants 1, 4, and 9 were also judged to have considerable familiarity with linguistics, despite having had only one course in the subject, based on their answers to the question, "Please describe your current familiarity with the field of linguistics" on the pre-questionnaire. Only Participants 6 and 10 had never taken a linguistics course. Therefore, the applied linguistics course did not serve as an introduction to the field for the majority of the students.

Materials

This study employed two questionnaires that included both closed-ended and open-ended questions, in order to provide as complete a picture as possible of participants' beliefs regarding language teaching and learning. Busch (2010) and others have used Horwitz's (1988) BALLI; however, because the goal of this study was to assess beliefs that related to specific course topics, the present study's questionnaires

were created. The questionnaires were hosted on Qualtrics; the pre-questionnaire was administered close to the start of the semester, and the post-questionnaire was administered after the class had ended. The post-questionnaire mainly differed from the pre-questionnaire in that three questions were included for participants to evaluate the course following its completion. The items from both questionnaires are included in the Appendix.

The questionnaires consisted of three sections, with 22 questions on the prequestionnaire and 18 on the post-questionnaire. Though the focus of the course was not language learning, many of the questions referred to the topic, because this was the central area of concern for the participants and the emphasis of several of the course assignments. Like the BALLI (Horwitz, 1988), the questionnaires contained many questions that did not have black-and-white answers. The first section was designed to collect the demographic and biographical data described in the previous section, while the second section asked open-ended questions of the participants about language, language learning, and language teaching, because one of the goals of the study was to examine beliefs that would not easily be quantified, such as how FLs are learned and participants' desired outcomes in the classroom. Following Attardo and Brown (2005) and Busch (2010), no distinction is made here between such constructs as beliefs, attitudes, or assumptions—any view on language teaching or learning is termed "belief." The third section contained statements about the same topics, plus others, such as prescriptivist views of language and whether having knowledge of linguistics can help the FL teacher, and the participants indicated the strength of their agreement with each statement, using a five-point scale. They were also invited to explain their ratings in a text box that followed each rating. The open-ended questions were designed to elicit more in-depth answers from the participants that would shed further light on their numerical ratings. While some questions might be perceived to be repetitive, a pilot study carried out in the fall of 2012 that used the questionnaires with an online section of the same course revealed that asking differently worded questions on similar topics often elicited more detail from the participants. With no specified length, the responses in the current study varied from single-word responses (though these were uncommon—most were at least two sentences long) to several paragraphs in length.

Procedure

At the beginning of the semester, the students enrolled in the course were invited to take part in the study by completing a pre-questionnaire at the start of the semester and the post-questionnaire when the course was over; they were made aware of the post-questionnaire during the informed consent process. They were notified that the surveys were not part of the class in any way, and that furthermore, the instructor/researcher would not see or analyze any of their responses until after the fall semester had ended and final grades had been turned in. Students took the surveys online, out of class. The questionnaires were not discussed in class, nor were they included in the syllabus as a class assignment. No class activities directly addressed the questions on the questionnaires.

The ratings the participants gave the statements on the final section of the pre- and post-questionnaires were analyzed quantitatively through independent and paired *t*-tests. Responses to the open-ended questions were analyzed qualitatively. These were first organized in tables in order to enable pre- and post-questionnaire comparisons. The responses were then examined for themes and labeled accordingly; in order to do this, key words were highlighted in individual responses, and the researcher then identified repetitions of the key words across participants. Key words were also compared across questionnaires. This process was repeated twice, in order to ensure that all data had been accounted for. The principles of thematic analysis (cf. Boyatzis, 1998) guided the interpretation stage. The next section presents the results of the analyses.

Findings

This section is organized by the research questions presented in the previous section. First, all parts of the first research question will be answered in turn by addressing each of the following components and the changes that were identified: beliefs about language, beliefs about language learning, and beliefs about language teaching. Both the numerical ratings and the answers to the open-ended questions were analyzed, and both are addressed in each subsection below. Table 2 provides the means of the numerical ratings for each statement on the questionnaires. The reader will recall that on the scale used for the majority of the statements on the questionnaire, there were five possible points, with five being *Strongly Agree* and one, *Strongly Disagree*.

Table 2

Mean Scores for All Statements on the Pre- and Post-Questionnaires.

Item	M (Pre)	M (Post)
How difficult is the task of the second/foreign language learner? ^a	2.90	1.90*
An understanding of linguistics can help you as a foreign language teacher.	4.60	4.80
It is important for a foreign language teacher to possess knowledge of second language acquisition.	4.80	4.40
Learning a foreign language is difficult.	3.70	4.00
Second languages are learned in a similar fashion to first languages.	2.67	2.44
Some dialects are better than others. ^b	1.67	1.40
Some dialects are more correct than others.	1.78	1.40

^aThere were seven possible answers for this question, from 1 (Very Difficult) to 7 (Very Easy).

^b One participant did not rate this statement or the following one on the pre-questionnaire.

p < .01

Beliefs about Language

The questions regarding beliefs about language in general had to do with prescriptivist notions of language. Little change was observed from the beginning to the end of the semester in participants' responses, as they already disagreed with the statements "Some dialects are better than others" and "Some dialects are more correct than others" on the pre-questionnaire. It was found that participants were already aware that these were prescriptivist statements at the start of the course, well in advance of their study of language variation. Similar ideas were illustrated in the explanations of the numerical ratings as well as the open-ended responses ("Is there a correct way to speak your native language? How about your second language?"), as participants stated that all languages are dialects, that there is no one correct dialect in any language, and that dialect usage varies by context. Even the participants who assigned higher ratings (i.e., less disagreement) to the statements mentioned similar factors as those who gave them lower ratings; some of them also took issue with the wording of the statements. These responses demonstrate the importance of having included open-ended questions on the questionnaires, because a merely quantitative analysis that only took into account the ratings would have missed these details. Overall, participants' beliefs in this particular area did not change per se but rather seemed to have been merely reinforced.

Beliefs about Language Learning

In a paired samples t-test that compared the mean scores of the ratings portion of the pre- and post-questionnaires, the only statistically significant difference² found was for the question "How difficult is the task of the second/foreign language learner?" At the beginning of the semester, the mean score was 2.9 on a seven-point scale, ranging from Very Difficult (1) to Very Easy (7). By the end of the semester, the mean rating for this question had fallen to 1.90 (p = .02). No one rated the task of the FL learner as Neither Difficult nor Easy by the end of the semester. It was found that those whose L1 was not English judged the task of the FL learner to be easier than did the NSs of English, both at the beginning of the semester and at the end of the semester, though all participants rated that task as more difficult at the end, as noted.

The responses to the statement, Learning a foreign language is difficult, followed the expected pattern, based on the perceived difficulty of the task of the FL learner. At the beginning of the semester, the statement, Learning a foreign language is difficult, received a mean score of 3.70 on a five-point scale, from Strongly Disagree (1) to Strongly Agree (5); by the end of the semester, this had changed to 4.00, indicating stronger agreement, though this finding was not statistically significant. The nonnative English speakers (NNESs) tended toward a more neutral rating of the statement, Learning a foreign language is difficult, both at the beginning of the semester (3.25 versus the NS group's 4.00) and at the end (3.75 versus the NS group's 4.17).

Three of the participants were not currently teaching or assisting in a classroom, so the next step of the analysis took their views into account, in comparison with those participants who were teaching or helping to teach FL classes, in an independent t-test. The rating for the question of *How difficult...* was significantly different on the post-test for these two groups, with those in the classroom rating the task as a mean of 2.29, and those not in the classroom, at 1.00 (p < .05); in other words, those who were actually teaching or helping to teach believed the task of the FL learner to be less difficult. Likewise, in response to the statement, Learning a foreign language is difficult, another significant difference was found, with those not in the classroom rating it with a mean of 4.67 (Agree) on the post-survey, and those in the classroom displaying a more neutral mean of 3.71.

The results from this point forward are presented solely in descriptive terms, through numerical means and qualitative analysis of the textual responses of the participants. The statement that Second languages are learned in a similar fashion to first languages represents a case where there is no one correct answer. Five of the participants showed no change by the end of the semester from their previous rating, while one participant did not select a rating on the pre-questionnaire, and one increased her rating by just one point. However, the remaining three participants flip-flopped from their pre-course scores. Participant 5 went from Disagree to Agree, though he noted in the justification for the score that "Partly Agree would be [his] real answer³." He stressed on both the pre-questionnaire and the post-questionnaire that L1 learning is largely unconscious, which makes it different from L2 learning. However, on the post-questionnaire, in response to the question, What does learning a second language have in common with learning a first language? What is different?, he cited both lexicon building and learning to articulate sounds as tasks that are more difficult when learning an L2.

Problems with pronunciation were also cited as a difference on the post-questionnaire by Participant 7. Participants 8 and 10 moved in the opposite direction from Participant 5, from Agree to Strongly Disagree for Participant 8 and Agree to Disagree for Participant 10. Participant 8 was the only one to mention instructed versus naturalistic L2 learning on the pre-questionnaire and claimed that similarity between L1 and L2 learning depended on the teacher and the learner. However, on the post-questionnaire, she cited as a similarity the necessity of exposure to the language in either case, but that instruction is usually needed for L2 learning. The only observable change for Participant 10, based on a comparison of her answers on the two questionnaires, is that she wrote on the post-questionnaire that "much more effort is needed" when learning a new language. She also noted that "in most cases it seems to be very different."

The next question asked, How can people best learn a FL? It was not associated with a statement to be ranked. There seemed to be minimal change in the answers from the pre-questionnaire to the post-questionnaire. Six participants cited the importance of immersion at both times; some allowed that this could be simulated outside the context of the L2 if necessary, either by the teacher or the learner. Participants 1 and 5 noted that the best way to learn depends on the learner and his or her personal characteristics or preferences. Participant 3 recommended exposure to culture at both times as the best way to learn, and on the post-questionnaire added the importance of repeated practice. Participants 7 and 9 named practice as the best way to learn.

The open-ended question, What barriers do you think hold students back from succeeding at learning a FL?, elicited responses that were strikingly similar at the preand post-questionnaires for each participant. The overarching themes were time, effort, practice or exposure, anxiety or fear, and lack of confidence. Interestingly,

Participants 5 and 10 listed ineffective teachers at the start of the course but not at the end; Participant 5 was teaching his own classes at the time, but Participant 10 was not in the classroom at all. Eight of the 10 participants cited affective factors as barriers on the pre-questionnaire, and the same number did so on the post-questionnaire. Five cited lack of opportunities to use the FL or lack of exposure to the FL on the prequestionnaire, and this number dropped to three on the post-questionnaire. Finally, three mentioned age on the post-questionnaire, whereas they had not on the prequestionnaire: Participant 6 referenced age in terms of affective factors, indicating that college-aged students are afraid to make mistakes, whereas young children are not, while Participant 7 merely listed age as one of five barriers, with no elaboration. Participant 9 simply stated that "older students have a lot of difficulty."

In the analysis of the textual data provided by the participants for the statements and questions having to do with language learning, providing personal examples emerged as a general tendency for contextualizing beliefs. Personal examples appeared in all of the topics on language learning, with the most listed for How difficult is the task of the second/foreign language learner? on the pre-questionnaire; Participants 4, 5, and 7 engaged in this strategy. Participant 7 wrote: "I think I am a shy person, so this factor doesn't allow me acquire fluency quickly. Other problems are the lack of self-confidence and the fact that I didn't practise foreign language in a realistic situation." Participant 4 explained the following:

For me, it was impossible to gain any sort of fluency in Spanish having to learn an entire semester's worth of information in a short 10 weeks, never having much in the way of conversation or reading practice, and simply being told to memorize grammar and vocabulary. I could write a paper decently enough, but I could never understand someone speaking to me. I was also only ever exposed to the language in class or through an hour of tutoring a week.

Two personal examples were provided for Second languages are learned in a similar fashion to first languages, by Participants 4 and 9 on the pre-questionnaire, and Participant 3 on the post-questionnaire. Participant 9 explained, "I think it depends on how they are taught. I studied Portuguese in a very natural environment but Mandarin in a very structured environment."

Beliefs about Language Teaching

For this category, there were two statements to be rated, with their corresponding opportunities for explanation, and one open-ended question. The first statement read as follows: An understanding of linguistics can help you as a FL teacher. Very little change was observed from the start of the semester to the end: all but three participants had rated the statement as Strongly Agree (5) on the pre-questionnaire. Participant 1 chose Agree at both times, while the remaining two participants each increased their ratings on the post-questionnaire by one point. Participant 2 changed from Agree to Strongly Agree by the post-questionnaire; her explanation at the start of the semester referenced how knowing about language universals (though she did not use that term) would help aid students. On the post-questionnaire, she wrote, "Understanding how language works will help a teacher better explain language teaching and implement lessons in the classroom." Indeed, the theme of explaining language

was mentioned by three other participants on the post-questionnaire. The idea that understanding language leads to understanding language learning was pervasive in the participants' answers on both the pre- and the post-questionnaires. Participant 6, who went from a neutral rating on the pre-questionnaire to Agree on the post-questionnaire, remarked that "linguistics helped me to realize how the Spanish language is as it is today. I was able to recognize patter[n]s in the language that I never saw before."

There were differences among the participants in terms of previous coursework undertaken in linguistics, and this appeared to be related to their beliefs at the start of the course. Those who had taken two or more linguistics courses (n = 4) already strongly agreed that an understanding of linguistics can help you as a FL teacher. Although those who had taken no previous linguistics courses (n = 2) expressed agreement with this statement, with a mean of 4.00, by the end of the semester this rating had increased to 4.50. The mean for this question for the group that had had one prior linguistics course also increased, from 4.5 to 4.75 by the end of the semester; these particular findings were not statistically significant.

For the second statement, It is important for a FL teacher to possess knowledge of SLA, again, little change was observed, as it seemed that at the start of the semester, the participants agreed with the idea. Nine of the 10 selected Strongly Agree, while one was neutral. On the post-questionnaire, two selected Agree, and seven selected Strongly Agree. However, Participant 7 selected Strongly Disagree but did not provide a justification. Most of the other participants echoed what they had written on the pre-questionnaire. However, Participant 6, who increased her rating from neutral to Agree by the end of the semester, started out with this explanation: "I do agree that it would be important to understand how a second language is acquired; however, I have yet to study this topic." On the post-questionnaire, she stated emphatically: "I just believe you cannot teach other students how to possess a second language with[out] having an understanding of it yourself."

The final question for this section was: What do you want your students to learn in your FL classes? This is certainly a difficult question to answer succinctly, so the answers cannot be considered to be comprehensive representations of the participants' teaching goals. It is also important to note that this topic, like the others, was not explicitly discussed in class, and perhaps it is even more true for this question than for the others that the answers cannot necessarily be attributed solely to the participants' experience of the applied linguistics class. Nonetheless, five of the 10 participants named specific goals for their students that did not appear at the beginning of the semester and were related to course topics. At the beginning of the course, students' being able to communicate in the target language was prevalent in the participants' stated goals, along with either grammar and culture, or the four skills (reading, writing, listening, and speaking) and culture. By the end, Participant 1 added "a greater appreciation for the language"; Participant 2 added "cultural and social aspects and a little bit of history of the language and the countries it is spoken in"; and Participant 9 added "how languages work and are related." These are all topics that encompass the course content studied and that were discussed explicitly during the semester in the applied linguistics course.

The post-questionnaire answers of Participants 4 and 5 did not resemble at all their pre-questionnaire answers. Participant 4 wrote in response to the question,

"Respect. Nearly every person I have met that speaks English as a second language has spoken very poorly of AAE and Southern dialects and accents. I want them to learn that non-standard dialects are not 'incorrect' so that they won't judge so harshly. Maybe in return, they will not be judged harshly for any perceived mistakes they make with English." Participant 5's answer read as follows: "French through French culture (C & c) [referring to the existence of multiple Francophone cultures, and to culture with both a "big" and "little" c], and also some slang (yes) and awareness about some of the French views around the world. I also like them to discover part of the culture (movies, songs, etc.) that relates to my own growth and experience (because I think it probably affected the way I speak my native language as well)..." Dialects and accents formed part of the unit of the course on language variation, and slang had been discussed as part of the unit on semantics and pragmatics. As can be seen, these answers, in addition to Participant 3's, also provided personal examples both of contact with L2 learners and their own first language use.

Evaluation of the Course

The second research question of the study focused on students' gains in knowledge as a result of the course. At the end of the post-questionnaire only, participants were asked to describe anything you have learned about language or linguistics in Applied Linguistics this semester that has influenced your beliefs about language teaching and/or language learning. Two of the participants said they were now more open to language varieties. Participant 1 wrote, "I definitely had some prescriptive opinions about language and propriety that have been replaced by descriptive opinions." Participant 4 echoed that sentiment: "I had leanings towards prescriptivism before taking FL 663. Now, I'm a hardcore descriptionist [sic], and that has completely changed my view about languages. It has expanded my horizons and made me want to teach tolerance of other dialects to my students. It also showed me that you can do more for students learning a language by helping them to code switch rather than correct, even native speakers of English." Two participants named phonetics and phonology as areas where they had gained knowledge. Apart from these two commonalities, each participant seemed to have felt he or she had gained something different from the course. Table 3 reports the themes that appeared in the participants' answers; the first column gives the participant number.

Table 3 Knowledge Gained That Has Influenced Participants' Beliefs about Language Teaching and Learning.

#	Theme(s)
1	Descriptivist attitude
2	History of languages Language universals
3	Linguistics as useful for language learning and teaching
4	Descriptivist attitude
5	Deeper knowledge of SLA Language and the brain

- 6 Language policies Language attitudes
- 7 Phonetics and phonology
- 8 Sapir-Whorf theory Misconceptions related to teaching Differences between L1 and L2 learning Universal Grammar as a theory Exposure to language as necessary for learning Linguistics as difficult Culture and language not always related
- 9 L1 acquisition
- 10 Phonetics Assignment design for L2 students

The final piece of this section sought to understand if and why participants would recommend the course to someone who wanted to be a FL teacher. All participants chose the option for Definitely Yes, except Participant 6, who chose Probably Yes. In their written explanations, three themes appeared frequently: teachers should know about linguistics (which is consistent with their ratings of the questionnaire statement to that effect); looking at language as a whole; and applications for teaching. The participants' own words are enlightening and are thus provided below in Table 4.

Table 4 Reasons Participants Would Recommend the Applied Linguistics Class⁴

Explanation

- 1 [The course] was great because it explored many different theories and turned them into practical applications. To me that was the most valuable part of the course. The fact that the material came to life through the teaching activities and papers.
- 2 This class makes you take a step back and look at language as a whole not just through the eyes of English. Its important that a teacher know where language comes from and how it changes. Just as in class we learned about idioms, slang terms, new phrases, etc. Its important to know these things in the languages we teach so that students will feel part of the language. I also think that its important that a FL teacher understand how the brain works in acquiring language which is briefly touched on in the textbook but a teacher should be able to recognize how her students are learning to meet their needs. Understanding Sociolinguists and pragmatics are two others things that a teacher should be familiar with to better teach students in the FL classroom.
- 3 As i mentioned, linguistics solved many of my questions and let me think more about the language. i benefited a lot from learning linguistics, so i hope other person can enjoy this process.

- You need to learn the life and art of language in order to teach language. 4
- It covers most (all?) areas of linguistics, and is thus a perfect introduction 5 to the concepts to know in order to teach. Even if some chapters cover elements already known by the potential student, it also allows to refresh memory and link it with personal reflections on teaching.
- 6 This class gives a great history and introduction to what is exactly "linguistics".
- I think this class is very interesting because i love linguistics, and I think everyone that wants to teach need this knowledges.
- 8 This was a great class where I learned a lot about the theories that I have been studying but since the perspective of a researcher that is not worried about proving anything but study it. I would recommend it because it is interesting, entertaining, and very practical.
- 9 A foreign language teacher needs to have a good understanding of linguistics and second language acquisition.
- Learn important terminology and strategies to teaching language

This section has presented the major trends in the findings of this research study. The next section discusses these findings in more depth, along with their implications for the program.

Discussion and Conclusion

Applied linguistics courses are common components in language teacher education programs, but as noted in the literature review, student outcomes are not always what the instructors of those courses intend. The purpose of this study was to analyze beliefs among pre-service FL teachers and whether they changed after taking a graduate course in applied linguistics. The findings indicate that the course was indeed valued by students and that beliefs regarding language learning did change somewhat over the course of the semester. This discussion focuses on the most salient results of the study.

The first component of the questionnaires dealt with attitudes toward varieties of language, asking in three different ways (two closed-ended and one open-ended question) whether there is a correct way to speak a language. Even though the ratings of the two prescriptivist statements decreased from the beginning to the end of the semester, the justifications that the majority of participants wrote demonstrated their disagreement with them from the start of the semester. This separates them in terms of their attitudes about language from many participants in studies by both Riegelhaupt and Carrasco (2005) and Attardo and Brown (2005), who, prior to (and to some extent following) taking the courses whose outcomes those studies analyzed, expressed support for the use of a standard variety of English over other varieties (Apache English and AAVE, respectively). The difference between participants in those studies and the participants of the present study may be that these students were both at the graduate level and engaged in the study of language and were thus more open to the topic. Nonetheless, when Participants 1 and 4 described themselves

as having been more prescriptivist in their views of language prior to the course, they may have known enough to recognize the statements on the questionnaire as incorrect, yet were not personally convinced of the value of nonstandard varieties until having studied the issue in depth later on in the course.

The most notable change in the participants' stated beliefs had to do with the perceived difficulty of language learning. While no one rated the task of the L2/FL learner as easy at the beginning of the semester, there were four participants who selected Neither Difficult nor Easy. By the end of the semester, all the ratings selected were solidly on the "difficult" end of the scale. It seems that the applied linguistics course, in which much time was spent discussing the complexities of language, may have helped to convince the students that language learners really do have much to learn. The reader will recall that the participants' teaching situation at the time of the study was significantly related to this belief, with those who were teaching or assisting rating it as less difficult than those who were not teaching or assisting. It was hypothesized that those who were not in the classroom at the time perhaps did not have a frame of reference or real contact with what the task of learning a FL looks like, beyond their own experience. It is important to note, though, that both those in the classroom and those who were not estimated the task of the FL learner to be more difficult following the completion of this course. Though not analyzed statistically due to the small sample size, the factor of the participants' L1 also appeared to be related to the perceived difficulty of L2 learning, with NNESs selecting higher ratings (i.e., less difficulty) than NSs. This could be because, while all the participants had studied FLs (six of them had studied three or more), the NNESs were living in the context of their L2 and had undertaken a graduate program of study in that language. In contrast, three of the NSs of English, despite the fact that two of them were enrolled in the Spanish emphasis of the graduate program, indicated in the background information portion of the pre-questionnaire that they felt they were fluent only in English. Perhaps more experience with an L2 and self-perceived fluency make the language learning task seem easier.

With regard to the issue of how people can best learn a FL, the predominance of the theme of immersion in the participants' answers is noteworthy. It is important to point out again here that the applied linguistics course did not emphasize SLA over the other course topics. However, some participants qualified their answers with the statement that where an immersion situation might not be available to learners, they can simulate aspects of it for themselves in multiple ways. The participants clearly have a grasp of the fact that the context of learning does not convey any guarantees about L2 acquisition—the use of input is up to the learner (Bardovi-Harlig, 1997, p. 34). The identification of immersion in any form did not seem to relate to participants' L1s, as both NSs and NNESs included it in their answers. The importance assigned to immersion did seem to relate to the participants' emphasis on the potential lack of opportunities for language practice and exposure to the L2 in their answers to the question of what barriers hold students back from succeeding at learning a FL. For some participants, on both questions, there was little change in the wording they used on the pre- and post-questionnaire for the barriers, even though they did not have access to their previous answers. This demonstrates the deep-seatedness of their beliefs about language learning.

While the belief in the role of immersion and opportunities for language practice (interpreted among the participants' responses as opportunities for language use, and not rote practice) does not seem to be detrimental in any way (cf. Peacock, 2001), but rather connected to the participants' own experience and coursework, attention should probably be drawn to these beliefs in the future, so that participants may become even more aware of where their beliefs come from and how they may affect their language teaching (e.g., Bailey, et al., 1996). If real-world practice is so important to these participants, what does that mean for their future teaching, and how could they be best supported in a language education program so that they are able to implement teaching that aligns with their beliefs? For instance, having already recognized the plight of the FL learners they teach or will teach, most of whom won't have access to communities of NSs with whom to use the target language, perhaps they could study how best to aid their students in creating simulated immersion experiences.

In describing their views of how people can best learn language and what barriers hold students back from success at language learning, the participants by and large showed a belief in the central role of the learner and a number of factors that are under learners' control, such as effort, time, motivation, laziness, not believing they can do it, and fear of failure or making mistakes. This awareness on the part of the participants that language learning depends in great part on the learner represents a shift in the field of SLA (Bardovi-Harlig, 1997) that has clearly filtered down to students. Additionally, they characterized teachers' knowledge as enabling them to help students.

The final piece of the data on participants' beliefs is about language teaching and particularly the role of knowledge of linguistics for the FL teacher. Strong agreement with both of the closed-ended statements, An understanding of linguistics can help you as a foreign language teacher and It is important for a foreign language teacher to possess knowledge of second language acquisition, was already present on the pre-questionnaire. This could have been due to participants' high expectations at the start of the course, perhaps because of their awareness that the course was required for their program. However, the ratings were even higher at the end of the semester for the statement about an understanding of linguistics. It is suspected that this would have actually been the case for the SLA statement as well; however, Participant 7 selected Strongly Disagree and did not provide a justification.

The participants' stated goals for what they wanted their students to learn in their FL classes did change from the start of the semester to the end. Nearly all of the participants at the beginning referenced general terms such as grammar, culture, the four skills, and being able to communicate in the FL. However, the answers Participants 1, 2, 4, 5, and 9 gave to the same question at the end of the semester displayed more variety and a broader focus that, as described in the previous section, encompassed course topics, suggesting that having taken the course, either alone or in combination with other courses in the program, could lead to change in participants' intentions for teaching. It is possible that those five participants engaged in more reflection on the applied part of the course than the others.

As described in the Findings section, participants made use of personal examples in explaining their language learning and teaching beliefs. It is important to

be aware that even when not explicitly stated in the responses, many of the beliefs the participants described likely came from their own experience. It seems that there is an apprenticeship of observation (Lortie, 1975) not only for classroom experience in general, but also one of a more introspective and specific nature that allows participants to absorb the factors in their own language learning in order to organize and make sense of their language teaching beliefs. The fact that the question about the difficulty of the task of the L2 learner was not framed in personal terms, (i.e. How difficult has your language learning been?) but rather in impersonal terms, and yet it resulted in the descriptions of three participants' own language learning, makes it clear that their experience has framed their views of language learning and the factors involved. It was observed that the strategy of relating personal examples was frequently used by Participants 3, 4, and 5; Participant 3 gave three personal examples but only on the post-questionnaire; Participant 4 provided three examples on the pre-questionnaire and one on the post-questionnaire; and Participant 5 provided two on the pre-questionnaire and one on the post-questionnaire. Perhaps this tendency is simply a characteristic of personality, such as introspection or self-awareness, but it seems that it would be a good quality to exploit in a teacher education program, as it is likely that not all learners are fully aware of potential relationships between their experiences and beliefs. Interestingly, these personal examples relate not to specific teachers or courses as in Bailey et al. (1996) or Johnson (1994), but to the way courses were structured or to the learning context in general.

The second research question sought to understand what participants felt they had gained from taking the applied linguistics course. As indicated previously, all but one said they would strongly recommend the course (Participant #6 answered that she would probably recommend the course), and their reasons were given in Table 4. It is interesting to note that only Participants 1 and 10 mentioned concrete uses of the knowledge gained in the course for their teaching practice. Participant 1 lauded the practical applications of the course and that "the material came to life through the teaching activities and papers." Participant 10 stated that she had learned about designing assignments for L2 students. Both of these participants were referring to the instructional activities assignments completed during the semester, in which students applied what they had learned in specified units to the creation of classroom activities for students. The activities themselves went through multiple drafts and received peer feedback as well as feedback from the professor. No other participant made direct reference to course activities. Nonetheless, the gains that participants named are on target with the topics presented and discussed in the course.

The variety of topics identified by participants as areas where knowledge was gained seems to represent the individual nature of their beliefs; it also speaks to the importance of relevance in course design in language teacher education programs (Bartels, 2005c; Thornbury, 1997). It is also clear that the course has at least some potential to influence what teachers desire that their students learn, based on the participants' answers to that question in this study, as half of them showed marked changes from the beginning of the semester. Therefore, one implication of this study is the importance of student reactions in helping to determine course content (cf. Ellis, 2010). Instructors of this type of course (and any such course in language teacher education programs) could present the same questions to students over multiple se-

mesters about whether they would recommend the course to FL teachers and what knowledge they feel they gained; this process could help instructors to better understand what resonates with students. On the other hand, topics that students do not mention as helpful or useful over time on the questionnaire could be reevaluated, or presented in class with an explicit explanation for students of why the material is relevant or how it could be applied in practice, if possible.

This study has brought to light pertinent factors related to pre-service teachers' language learning and teaching beliefs. The findings, however, are subject to two main limitations: the relatively small participant group and the singular mode of data collection. The low number of participants made it impossible to analyze some of the questionnaire results statistically and to find statistical significance in some analyses. Nonetheless, this study set out to investigate the possible effects of the applied linguistics course specifically, and only eleven students were enrolled in the course during that semester (with 10 completing both the pre-questionnaire and the post-questionnaire). Despite the specific nature of the course investigated here, it is suspected that some findings may be generalizable to other master's programs in teaching languages with a similar curriculum (e.g., linguistics, language, and methodology courses). In any case, instructors of linguistics courses and researchers may wish to explore further the issues raised by these findings, in light of their potential implications for course design and relevance.

The study would also have been made stronger with an additional method of data collection, one that went beyond the written answers on the questionnaires. Observation of the participants in the classroom, which is recommended in the literature on teacher beliefs, was not a viable option in this case, since only two of the participants were teaching at the time; in addition, the beliefs measured on the questionnaires were not directly observable. Carrying out interviews with the participants, though, would have allowed for the opportunity to clarify answers on the questionnaires and for the researcher to seek more detail from participants. However, because the researcher was also the instructor, it was seen as problematic to ask more of the participants than filling out the two questionnaires, which might have put undue pressure on students to participate in the study. Future studies that examine the outcomes of linguistics courses for language teachers should probably, to the extent possible, work with students of other instructors so that they can avoid this issue.

This study has contributed an understanding of what beliefs of students in a language education program may change over the course of a semester-long linguistics class; in some cases, it seems that the participants' own beliefs were confirmed or perhaps even reinforced by course material. Future research should address how it is that beliefs actually change during such a course and attempt to control for or identify other factors that may influence teacher beliefs. The results of this study do appear to confirm the perceived importance of the applied linguistics course among future FL teachers (Bartels, 2005c). The course appears to have encouraged students to reflect on the complexity of language and may have helped them see L2 learning as more difficult than they did prior to the course.

The study has also contributed insight into how students' perceptions of the difficulty of L2 learning may relate to their own L1s and their teaching experience. These factors do not appear to have been studied previously in this way in connection with language learning beliefs. This information is useful for language teacher educators and for the students themselves, as they may become more aware of their own beliefs as they undertake advanced degrees (cf. Borg, 2011). Teacher educators can leverage this awareness on the part of the students as a way to increase relevance and assist with the intake of course material. It is proposed that teacher educators research their own students' beliefs to inform methodology courses, as this would serve to help strengthen the articulation of courses in language teacher education programs and ensure the relevance of content across courses.

Notes

- ¹ In the course described as part of the study presented in this paper, the technical distinction between second and foreign language learning was presented to students; however, during the course of the semester, the terms were often used interchangeably. Similarly, the terms are used interchangeably in this
- ² It is important to note that the small number of participants may have limited the possibility of finding statistical significance for other items.
- ³ Participant responses are given verbatim and have not been edited, except for occasional clarifications where needed; these are provided in brackets.
- ⁴ Participant responses are provided exactly as they were written on the post-questionnaire, with the exception of one bracketed clarification.

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Appendix

Questionnaire

Please answer the questions on the following survey as honestly as you can.

What is your native language?

What languages have you studied formally?

In what languages do you consider yourself to be fluent?

Please indicate each of the following that applies to your teaching of foreign/second languages.

- I have taught in the past but am not currently teaching.
- I am currently teaching my own class(es) at USM.
- I am currently teaching my own class(es) at a location other than USM.
- I am currently assisting someone in class, as a TA.

- I am neither teaching nor assisting now but am planning to teach in the future.
- I am neither teaching nor assisting, and I don't plan to teach in the future.
- I provide tutoring.

How many years have you been teaching or did you teach?

- Less than 1
- 2-5
- 6-10
- 11-15
- 16-20
- More than 20

Please state what language(s), class(es), and level(s) you either currently teach or plan to teach.

Please describe your current familiarity with the field of linguistics.

What other core courses have you taken in the program? (Check all that apply.)

- Teaching Methods
- Second Language Acquisition
- Sociolinguistics and Sociocultural Perspectives

What previous linguistics courses have you taken, and where and when?

What do you want your students to learn in your foreign language classes?

How difficult is the task of the second/foreign language learner?

- Very Difficult (1)
- Difficult (2)
- Somewhat Difficult (3)
- Neither Difficult nor Easy (4)
- Somewhat Easy (5)
- Easy (6)
- Very Easy (7)

Please explain your answer to the previous question.

How can people best learn a foreign language?

What barriers do you think hold students back from succeeding at learning a foreign language?

Is there is a "correct" way to speak your native language? How about your second language? Describe.

What does learning a second language have in common with learning a first language? What is different?

Please indicate which of the following terms you could define without looking them up.

- phonetics
- phonology
- · morphology
- syntax
- · sociolinguistics
- dialectology
- lexicon
- · pragmatics
- semantics

Please express your agreement or disagreement with the following statements, and explain your answers in the text boxes that follow each question.

An understanding of linguistics can help you as a foreign language teacher.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Please explain your answer to the previous question.

It is important for a foreign language teacher to possess knowledge of second language acquisition.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Please explain your answer to the previous question.

Learning a foreign language is difficult.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Please explain your answer to the previous question.

Second languages are learned in a similar fashion to first languages.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Please explain your answer to the previous question.

Some dialects are better than others.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Please explain your answer to the previous question.

Some dialects are more correct than others.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)
- Please explain your answer to the previous question.

The following questions appeared on the post-questionnaire only:

Has anything changed about your current teaching situation or your plans to teach in the future since you took the pre-survey in September? If so, please describe.

Please describe anything you have learned about language or linguistics in FL 663 this semester that has influenced your beliefs about language teaching and/or language learning.

Would you recommend this class to someone who wants to be a foreign language teacher?

- Definitely Yes (1)
- Probably Yes (2)
- Maybe (3)
- Probably Not (4)
- Definitely Not (5)

Please describe your reasons for your answer to the previous question.

Is there anything else you would like to comment on?